## Amendments to and Listing of the Claims:

Please *cancel claims 1-29* and *add new claims 30-53*, all without prejudice, as shown below in the following listing of all claims ever presented. The following listing of claims replaces all prior versions thereof.

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## 1-29. (Canceled)

30. (New) A conjugated, neutral phosphorescent polymer comprising at least one covalently bonded phosphorescent metal complex and having a structure of the general formulae C or D:

$$L^{2}_{z}$$
  $M - L^{1} - Ar^{1} - Ar^{1} - M \cdot \cdot \cdot L^{2}_{z}$   $C$ 

$$L_{z}^{2} \cdots M - L_{z}^{1} - (Ar^{1}, Ar^{2}) \frac{1}{\ln} L_{z}^{1} - M \cdots L_{z}^{2}$$

$$D$$

wherein  $Ar^1$  and  $Ar^2$  are identical or different and, independently of one another, represent optionally  $C_1$ - $C_{30}$ -alkyl-substituted  $C_5$ - $C_{20}$ -aryl units and/or optionally  $C_1$ - $C_{30}$ -alkyl-substituted heteroaryl units having 5 to 9 ring C atoms and 1 to 3 ring hetero atoms from the group consisting of nitrogen, oxygen and sulphur;

wherein the at least one phosphorescent metal complex is covalently bonded by a ligand  $L^1$  and the ligand  $L^1$  and a ligand  $L^2$  complex the metal M in a chelate-like manner, wherein each ligand  $L^1$  represents a unit of the formulae I to XXIX

wherein each R, independently of one another may be identical or different, represents H, F,  $CF_3$ , a linear or branched  $C_1$ - $C_{22}$ -alkyl group, a linear or branched  $C_1$ - $C_{22}$ -alkoxy group, an optionally  $C_1$ - $C_{30}$ -alkyl-substituted  $C_5$ - $C_{20}$ -aryl unit and/or an optionally  $C_1$ - $C_{30}$ -alkyl-substituted heteroaryl unit having 5 to 9 ring C atoms and 1 to 3 ring hetero atoms from the group consisting of nitrogen, oxygen and sulphur, and wherein one of the two linkage positions is saturated by H, F,  $CF_3$ , a linear or branched  $C_1$ - $C_{22}$ -alkyl group, a linear or branched  $C_1$ - $C_{22}$ -alkyl-substituted  $C_5$ - $C_{20}$ -aryl unit and/or an optionally  $C_1$ - $C_{30}$ -alkyl-substituted

heteroaryl unit having 5 to 9 ring C atoms and 1 to 3 ring hetero atoms from the group consisting of nitrogen, oxygen and sulphur;

wherein each ligand  $L^2$ , independent of  $L^1$ , independently represents a unit of the formulae I to XXIX, wherein the two linkage positions, independently of one another, are saturated by H, F, CF<sub>3</sub>, a linear or branched  $C_1$ - $C_{22}$ -alkyl group, a linear or branched  $C_1$ - $C_{22}$ -alkoxy group, an optionally  $C_1$ - $C_{30}$ -alkyl-substituted  $C_5$ - $C_{20}$ -aryl unit and/or an optionally  $C_1$ - $C_{30}$ -alkyl-substituted heteroaryl units having 5 to 9 ring C atoms and 1 to 3 ring hetero atoms from the group consisting of nitrogen, oxygen and sulphur;

wherein each M represents iridium(III), platinum(II), osmium(II) or gallium(III), wherein n represents an integer from 3 to 10 000, and wherein z represents an integer from 0 to 3.

31. (New) The conjugated, neutral phosphorescent polymer according to claim 30, wherein Ar<sup>1</sup> and Ar<sup>2</sup> are identical or different and, independently of one another, represent thiophene units of the formula XXX and XXXI, benzene, biphenyl and fluorene units of the formulae XXXII to XXXIV and/or heterocycles of the formulae XXXV to XXXXXIV:

wherein each R, independently of one another may be identical or different, represents H, F, CF<sub>3</sub>, a linear or branched  $C_1$ - $C_{22}$ -alkyl group, a linear or branched  $C_1$ - $C_{22}$ -alkoxy group, an optionally  $C_1$ - $C_{30}$ -alkyl-substituted  $C_5$ - $C_{22}$ -aryl unit and/or an optionally  $C_1$ - $C_{30}$ -alkyl-substituted heteroaryl unit having 5 to 9 ring C atoms and 1 to 3 ring hetero atoms from the group consisting of nitrogen, oxygen and sulphur.

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32. (New) The conjugated, neutral phosphorescent polymer according to claim 30, wherein Ar<sup>1</sup> and Ar<sup>2</sup> are identical or different and, independently of one another, represent thiophene units of the formulae XXX and XXXI and benzene, biphenyl and fluorene units of the formulae XXXII to XXXIV:

wherein  $L^1$  and  $L^2$  are units selected from the formulae I, II, III, VIII, XVIII, XX, XXI, XXIV, XXVII, XXVIII and XXIX:

XXVII

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wherein M represents osmium(II), iridium(III) and platinum(II), n represents an integer from 5 to 500, and z represents an integer from 1 to 3.

**XXVIII** 

XXIX

33. **(New)** A conjugated, neutral phosphorescent polymer comprising at least one covalently bonded phosphorescent metal complex and having repeating units selected from the general formulae A and B-I-1 to B-I-5, or A and B-II-1 to B-II-4, or having a structure of the general formulae C-1 or C-2:

A B-I-1

B-I-3

$$R^3$$
 $R^3$ 
 $R^3$ 

B-II-1

B-II-2

B-II-3

B-II-4

R

Ar

I

R

Ar

I

R

C-1

$$R^5$$
 $R^5$ 
 $R^5$ 
 $R^5$ 
 $R^2$ 
 $R^2$ 
 $R^2$ 
 $R^2$ 
 $R^3$ 
 $R^4$ 
 $R^4$ 

wherein Ar<sup>1</sup> represents

$$Ar^2$$
 represents

$$Ar^2$$
 represents

L represents

.

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R<sup>1</sup> represents dodecyl, R<sup>2</sup> represents n-octyl or 2-ethylhexyl, R<sup>3</sup> represents methyl or ethyl, R<sup>4</sup> represents methyl or n-hexyl, R<sup>5</sup> represents methyl or phenyl, Z represents a CH<sub>2</sub> or C=O group, and wherein n represents an integer from 3 to 10 000.

34. (New) A conjugated, neutral phosphorescent polymer comprising at least one covalently bonded phosphorescent metal complex and having a structure of the general formulae C or D:

$$L^2_z$$
  $M-L^1$   $Ar^1$   $n$   $L^1$   $M$   $L^2_z$   $C$ 

wherein  $Ar^1$  and  $Ar^2$  are identical or different and, independently of one another, represent optionally  $C_1$ - $C_{30}$ -alkyl-substituted  $C_5$ - $C_{20}$ -aryl units and/or optionally  $C_1$ - $C_{30}$ -alkyl-substituted heteroaryl units having 5 to 9 ring C atoms and 1 to 3 ring hetero atoms from the group consisting of nitrogen, oxygen and sulphur;

wherein the at least one phosphorescent metal complex is covalently bonded by a ligand  $L^1$  and the ligand  $L^1$  and a ligand  $L^2$  complex the metal M in a chelate-like manner, wherein each ligand  $L^1$  represents a unit of the formulae I to XXIXc:

wherein each R, independently of one another may be identical or different, represents H, F, CF<sub>3</sub>, a linear or branched  $C_1$ - $C_{22}$ -alkyl group, a linear or branched  $C_1$ - $C_{22}$ -alkoxy group, an optionally  $C_1-C_{30}-alkyl-substituted\ C_5-C_{20}-aryl\ unit\ and/or\ an\ optionally\ C_1-C_{30}-alkyl-substituted\ heteroaryl$ unit having 5 to 9 ring C atoms and 1 to 3 ring hetero atoms from the group consisting of nitrogen, oxygen and sulphur and/or represent a linear or branched partly fluorinated or perfluorinated C<sub>1</sub>-C<sub>22</sub>-alkyl group, a linear or branched C<sub>1</sub>-C<sub>22</sub>-alkoxycarbonyl group, a cyano group, a nitro group, an amino group, an alkylamino, dialkylamino, arylamino, diarylamino or alkylarylamino group or represent an alkyl- or arylcarbonyl group, alkyl denoting C<sub>1</sub>-C<sub>30</sub>-alkyl and aryl denoting C5-C20-aryl, and wherein one of the two linkage positions being saturated by H, F, CF<sub>3</sub>, a linear or branched C<sub>1</sub>-C<sub>22</sub>-alkyl group, a linear or branched C<sub>1</sub>-C<sub>22</sub>-alkoxy group, an optionally  $C_1$ - $C_{30}$ -alkyl-substituted  $C_5$ - $C_{20}$ -aryl unit and/or an optionally  $C_1$ - $C_{30}$ -alkyl-substituted heteroaryl unit having 5 to 9 ring C atoms and 1 to 3 ring hetero atoms from the group consisting of nitrogen, oxygen and sulphur and/or by a linear or branched, partly fluorinated or perfluorinated C1-C22-alkyl group, a linear or branched C1-C22-alkoxycarbonyl group, a cyano group, a nitro group, an amino group, an alkylamino, dialkylamino, arylamino, diarylamino or alkylarylamino group or by an alkyl- or arylcarbonyl group, alkyl denoting C1-C30-alkyl and aryl denoting C5-C20-aryl;

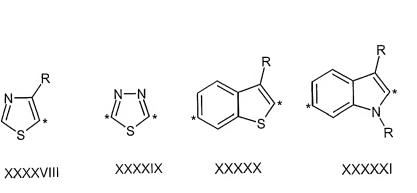
wherein each ligand  $L^2$ , independent of  $L^1$ , independently represents a unit of the formulae I to XXIX, wherein the two linkage positions independently of one another being saturated by H, F, CF<sub>3</sub>, a linear or branched  $C_1$ - $C_{22}$ -alkyl group, a linear or branched  $C_1$ - $C_{22}$ -alkyl-substituted  $C_5$ - $C_{20}$ -aryl unit and/or an optionally  $C_1$ - $C_{30}$ -alkyl-substituted heteroaryl unit having 5 to 9 ring C atoms and 1 to 3 ring hetero atoms from the group consisting of nitrogen, oxygen and sulphur and/or by a linear or branched, partly fluorinated or perfluorinated  $C_1$ - $C_{22}$ -alkyl group, a linear or branched  $C_1$ - $C_{22}$ -alkoxycarbonyl group, a cyano group, a nitro group, an amino group, an alkylamino, dialkylamino, arylamino, diarylamino or alkylarylamino group or by an alkyl- or arylcarbonyl group, alkyl denoting  $C_1$ - $C_{30}$ -alkyl and aryl denoting  $C_5$ - $C_{20}$ -aryl;

wherein each M represents iridium(III), platinum(II), osmium(II), gallium(III) or rhodium(III),

wherein n represents an integer from 3 to 10 000, and wherein z represents an integer from 0 to 3.

35. **(New)** The conjugated, neutral phosphorescent polymer according to claim 34, wherein Ar<sup>1</sup> and Ar<sup>2</sup> are identical or different and, independently of one another, represent thiophene units of the formulae XXX and XXXI, benzene, biphenyl and fluorene units of the formulae XXXII to XXXIV and/or heterocycles of the formulae XXXXIV and/or units of the formulae XXXXXV to XXXXXXIII:

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wherein each R, independently of one another may be identical or different, represents H, F,  $CF_3$ , a linear or branched  $C_1$ - $C_{22}$ -alkyl group, a linear or branched  $C_1$ - $C_{22}$ -alkoxy group, an optionally  $C_1$ - $C_{30}$ -alkyl-substituted  $C_5$ - $C_{20}$ -aryl unit and/or an optionally  $C_1$ - $C_{30}$ -alkyl-substituted heteroaryl unit having 5 to 9 ring C atoms and 1 to 3 ring hetero atoms from the group consisting of nitrogen, oxygen and sulphur and/or represent a linear or branched, partly fluorinated or perfluorinated  $C_1$ - $C_{22}$ -alkyl group, a linear or branched  $C_1$ - $C_{22}$ -alkoxycarbonyl group, a cyano group, a nitro group, an amino group, an alkylamino, dialkylamino, arylamino, diarylamino or

alkylarylamino group or represent an alkyl- or arylcarbonyl group, alkyl denoting  $C_1$ - $C_{30}$ -alkyl and aryl denoting  $C_5$ - $C_{20}$ -aryl.

36. (New) A conjugated, neutral phosphorescent polymer comprising at least one covalently bonded phosphorescent metal complex and having repeating units selected from the general formulae A and B-I-1 to B-I-6, or A and B-II-1 to B-II-4, or having a structure of the general formulae C-1, C-2 or C-3 or D-1, D-2 or D3:

$$\begin{array}{c} L_{\text{print}}L_{\text{print}$$

$$B$$
-I--5

 $B$ -I--6

 $CH_3$ 
 $R^3$ 
 $R^3$ 
 $CH_3$ 
 $R^4$ 
 $R^4$ 

$$R^{5}$$
 $R^{5}$ 
 $R^{5}$ 

wherein Ar<sup>1</sup> represents

Ar<sup>2</sup> represents

L represents

$$\begin{array}{c|c} & & & \\ &$$

$$\begin{array}{c|c} & & & \\ & & & \\$$

 $R^1$  represents dodecyl,  $R^2$  represents n-octyl or 2-ethylhexyl,  $R^3$  represents methyl or ethyl,  $R^4$  represents methyl or n-hexyl,  $R^5$  represents methyl or phenyl,  $R^6$  represents H, a linear or branched  $C_1$ - $C_{22}$ -alkyl group or a linear or branched  $C_1$ - $C_{22}$ -alkoxy group, Z represents a  $CH_2$  or C=O group, and n represents an integer from 3 to 10 000.

37. (New) A luminescent polymer comprising a conjugated main chain and at least one covalently bonded metal complex, wherein the luminescence is a combination of fluorescence of the conjugated main chain and of phosphorescence of the at least one covalently bonded metal complex, wherein the metal complex or complexes, which may be identical or different, is or are covalently bonded to ends of the conjugated main chain, and wherein the luminescent polymer has a structure of the general formula (Ia) or (Ib):

$$L^{2}_{z} \cdots M - L^{\frac{1}{2}} \underbrace{Ar^{\frac{1}{2}} n} L^{\frac{1}{2}} M \cdots L^{2}_{z}$$
 (Ia)

$$L_z^2 = M - L_z^1 - (Ar^1, Ar^2) + \frac{1}{n} L_z^1 - M = L_z^2$$
 (Ib),

wherein Ar<sup>1</sup> represents optionally substituted phenylene units (IIa) or (IIb), biphenylene units (IIc), fluorenylene units (IId), dihydroindenofluorenylene units (IIe), spirobifluorenylene (IIf), dihydrophenanthrylene units (IIg) or tetrahydropyrenylene units (IIh),

wherein Ar<sup>2</sup> differs from Ar<sup>1</sup> and represents units selected from (IIa) to (IIq)

 $L^1$  and  $L^2$  in each case are identical or different and,

L<sup>1</sup> is a ligand of the formulae (IIIa-1) to (IIId-1)

wherein Ar represents optionally substituted phenylene, biphenylene, naphthylene, thienylene or fluorenylene units,

L<sup>2</sup> independently of L<sup>1</sup>, is a ligand selected from units of the formulae (IVa-1) to (IVy-1)

the ligands L¹ and L² complex the metal M in a chelate-like manner, M represents iridium(III), platinum(II), osmium(II) or rhodium(III), n represents an integer from 3 to 10 000, z is an integer from 1 to 3 and each R, independently of one another may be identical or different, represents H, F, CF<sub>3</sub>, a linear or branched C<sub>1</sub>-C<sub>22</sub>-alkyl group, a linear or branched partly fluorinated or perfluorinated C<sub>1</sub>-C<sub>22</sub>-alkyl group, a linear or branched C<sub>1</sub>-C<sub>22</sub>-alkoxy group, an optionally C<sub>1</sub>-C<sub>30</sub>-alkyl-substituted C<sub>5</sub>-C<sub>20</sub>-aryl unit and/or an optionally C<sub>1</sub>-C<sub>30</sub>-alkyl-substituted heteroaryl unit having 5 to 9 ring C atoms and 1 to 3 ring hetero atoms from the group consisting of nitrogen, oxygen and sulphur.

38. (New) A luminescent polymer comprising a conjugated main chain and at least one covalently bonded metal complex, wherein the luminescence is a combination of fluorescence of the conjugated main chain and of phosphorescence of the at least one covalently bonded metal complex, wherein the metal complex or complexes, which may be identical or different, is or are covalently bonded to ends of the conjugated main chain, and wherein the luminescent polymer has n repeating units of the general formulae (Ic-1) and (Id-1)

$$* - Ar^{\frac{1}{2}} *$$

$$(Ic-1)$$

$$(Id-1)$$

wherein R represents a linear or branched  $C_1$ - $C_{22}$ -alkyl group or a linear or branched partly fluorinated or perfluorinated  $C_1$ - $C_{22}$ -alkyl group and wherein  $\operatorname{Ar}^1$  represents optionally substituted phenylene units (IIa) or (IIb), biphenylene units (IIc), fluorenylene units (IId), dihydroindenofluorenylene units (IIe), spirobifluorenylene units (IIf), dihydrophenanthrylene units (IIg) or tetrahydropyrenylene units (IIh)

wherein L<sup>2</sup> is a ligand selected from units of the formulae (IVa-1) to (IVy-1)

and wherein n represents an integer from 3 to 10 000.

- 39. (New) The luminescent polymer according to claim 37 or 38, wherein the luminescence comprises emitting white light.
- 40. (New) The luminescent polymer according to claim 37 or 38, wherein the luminescence comprises emitting light defined by a colour location of  $x = 0.33 \pm 0.13$  and  $y = 0.33 \pm 0.13$  in the chromaticity diagram according to CIE 1931.
- 41. (New) The luminescent polymer according to claim 37, having a structure of the general formulae (Ia-1) to (Ib-2)

wherein R represents a linear or branched  $C_1$ - $C_{22}$ -alkyl group or a linear or branched partly fluorinated or perfluorinated  $C_1$ - $C_{22}$ -alkyl group and n,  $Ar^1$ ,  $Ar^2$  and  $L^2$  have the meanings defined in claim 37.

42. **(New)** The luminescent polymer according to claim 37, having a structure of the general formulae (Ia-3) or (Ib-3):

wherein R represents a linear or branched  $C_1$ - $C_{22}$ -alkyl group or a linear or branched partly fluorinated or perfluorinated  $C_1$ - $C_{22}$ -alkyl group and n,  $Ar^1$ ,  $Ar^2$  and  $L^2$  have the meanings defined in claim 37.

43. (New) The luminescent polymer according to claim 37 or 38, wherein  $L^2$  represents ligands selected from units of the formulae:

44. (New) The luminescent polymer according to claim 37 or 38, wherein Ar<sup>1</sup> and Ar<sup>2</sup>, independently of one another, represent units of the formulae

wherein R represents a linear or branched C<sub>1</sub>-C<sub>22</sub>-alkyl group.

45. (New) The luminescent polymer according to claim 43, wherein Ar<sup>1</sup> and Ar<sup>2</sup>, independently of one another, represent units of the formulae

wherein R represents a linear or branched C<sub>1</sub>-C<sub>22</sub>-alkyl group.

- 46. (New) The luminescent polymer according to claim 37 or 38, wherein n represents an integer from 10 to 5 000.
- 47. **(New)** A process for preparing the conjugated, neutral phosphorescent polymer according to claim 30, 31 or 33 or the luminescent polymer according to claim 37 or 38, the process comprising complexing a ligand polymer with iridium(III), platinum(III), osmium(III) or rhodium(IIII) precursor complexes.
- 48. **(New)** The process according to claim 47, wherein the ligand polymer is complexed with an iridium(III) precursor complexes of the general formula E

$$(L^2)_2 \operatorname{Ir}(\mu\text{-Cl})_2 \operatorname{Ir}(L^2)_2$$

E.

- 49. (New) A light-emitting component comprising the conjugated, neutral phosphorescent polymer according to claim 30, 31 or 33 or the luminescent polymer according to claim 37 or 38, or combinations thereof.
- 50. (New) An electroluminescent arrangement comprising the conjugated, neutral phosphorescent polymer according to claim 30, 31 or 33 or the luminescent polymer according to claim 37 or 38, or combinations thereof.

comprising a hole-injecting layer.

51. (New) The electroluminescent arrangement according to claim 50, further

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- 52. (New) A process for producing the electroluminescent arrangement according to claim 50, wherein phosphorescent or luminescent polymer is applied as a solution to form an electroluminescent element.
- 53. (New) A process for producing the electroluminescent arrangement according to claim 51, wherein phosphorescent or luminescent polymer is applied as a solution to form an electroluminescent element.